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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/810,679	02/28/97	HICKMAN	P ENVSP02SBA

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EXAMINER

TITCOMB, W

ART UNIT	PAPER NUMBER
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2757

DATE MAILED: 11/30/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
08/810,679

Applicant(s)
Hickman, et al.

Examiner
William Titcomb

Group Art Unit
2757



☒ Responsive to communication(s) filed on 7-28-99

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-20 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-20 is/are rejected.

☒ Claim(s) 17 and 18 is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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Part III. DETAILED ACTION

Drawings

1. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Specification

2. Claims 1-20 are presented for examination.
3. Applicant is suggested to number the lines of each claim. The preferred format is to number each line of every claim, with each claim beginning with line 1. For ease of reference by both the Examiner and Applicant all future correspondence should include the recommended line numbering.

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Claim Objections

4. Claims 17 and 18 ***still stand*** objected to because of the following informalities:

As per claims 17, and 18, Applicant claims a computer readable media as shown on line 1. However, the claim is not structured to specifically associate the executable programs instructions with the functions being performed, such that there is no doubt that the instructions performing these functions are stored on the computer readable medium. Such an association will eliminate any possible ambiguities that may lead to possible 35 U.S.C. 101 problems regarding computer programs. The Examiner suggests that if the Applicant is trying to claim a product claim, the following example may be used:

(A computer program product comprises a computer useable medium having computer readable program code embodied on said medium for ...having ..., said computer program product comprising:

detection procedure code means ...)

Appropriate correction is required.

Double Patenting

5. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful

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process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321 (c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Application No. 08/798,704 -- Statutory Double Patenting

7. Claims 1-14 and 16-18, are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-14 and 16-18, of copending Application No. 08/798,704. This

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is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Application No. 08/798,704 -- Obvious-Type Double Patenting

8. Claims 19-20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 19-20 of copending Application No. 08/798,704. Although the conflicting claims are not identical, they are not patentably distinct from each other because the differences are very marginal (see following comparison table).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The distinction between the present application and Application No. 08/798,704 are as follows:

Application No. 08/798,704	Application No. 08/810,679 (presently under examination)
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<p>Claims 19 and 20</p> <p>19. "A wide area TCP/IP protocol network comprising:</p> <ul style="list-style-type: none"> • <u>at least one ground station</u> ..., and at least <u>one ground station being coupled to a TCP/IP protocol network to exchange TCP/IP data packets with said network;</u> 	<p>Claims 19 and 20</p> <p>19. "A wide area TCP/IP protocol network comprising:</p> <ul style="list-style-type: none"> • <u>a plurality terrestrial nodes</u> ..., where at least <u>some of said terrestrial nodes are capable of repeating TCP/IP data packets destined for other terrestrial nodes;</u>
	<p>The distinction would have been obvious to substitute "a plurality" for "at least one" and "terrestrial nodes" for "ground station" since both substitutions are replacing one term with another that is inherently synonymous.</p>
<ul style="list-style-type: none"> • ... <u>non geo-synchronous earth-orbiting bodies</u> ... <u>earth-orbiting bodies</u> ... can communicate with said at least one <u>ground station</u> at any given point in time, such that the satellites form a part of said network; and 	<ul style="list-style-type: none"> • ... <u>non-terrestrial nodes</u> ... <u>non-terrestrial nodes</u> ... can communicate with at least one <u>non-terrestrial node</u>, and wherein said at least one non-terrestrial node includes

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	<p>The distinction would have been obvious to substitute the term “non-terrestrial nodes” for “non geo-synchronous earth-orbiting bodies”, because figures 33 and 34 show a communication link (handing off) involving at least one satellite, operating as part of a network.</p>
<ul style="list-style-type: none">• <u>a host computer on one of said earth-orbiting bodies and implementing host computer program means that permits the remote control of said host computer by a client computer coupled to said network.”</u>	<p><u>a host computer that can be controlled from a terrestrial node due to a host computer program means implemented on said host computer.”</u></p>
	<p>The distinction would have been obvious to substitute control of at least one “non-terrestrial node includ[ing] a host computer” for control of “a host computer on one of said earth-orbiting bodies” since the terms are inherently synonymous.</p>

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<p>20. "A wide area TCP/IP protocol network as recited in claim 19 wherein:</p> <ul style="list-style-type: none">• ... <u>earth-orbiting bodies include a plurality of low-earth orbit satellites that communicate with TCP/IP compatible data packets,</u>	<p>20. "A wide area TCP/IP protocol network as recited in claim 19 wherein:</p> <ul style="list-style-type: none">• ... <u>non-terrestrial nodes include a plurality of earth-orbiting satellites that communicate with TCP/IP compatible data packets,</u>
	<p>The distinction would have been obvious to substitute the term "non-terrestrial nodes" for "non geo-synchronous earth-orbiting bodies", because figures 33 and 34 show a communication link (handing off) involving at least one satellite, operating as part of a network.</p>
<p>said satellites communicating both with <u>said ground station</u> and with at least one other satellite, said satellites handing off communication with said <u>ground station</u> to a satellite that is in a best position to communicate with said <u>ground station</u>."</p>	<p>and wherein said <u>terrestrial nodes</u> repeat a received TCP/IP data packet if it is not timed out, if it has not previously received that data packet, and if that data packet was not destined for that <u>terrestrial node</u>."</p>

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	It would have been obvious to substitute the term "non-terrestrial nodes" for "earth-orbiting bodies", within the context of a communication system, including, satellite to ground (or terrestrial) station (or node) handshaking.
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Application No. 08/799,787 -- Statutory Double Patenting

9. Claims 1-14 and 16-18, are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-14 and 16-18, of copending Application No. 08/799,787. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Application No. 08/799,787 -- Obvious-Type Double Patenting

10. Claims 19-20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 19-20 of copending Application No. 08/799,787. Although the conflicting claims are not identical, they are not

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patentably distinct from each other because the differences are very marginal (see following comparison table).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The distinction between the present application and Application No. 08/799,787 are as follows:

Application No. 08/799,787	Application No. 08/810,679 (presently under examination)
Claims 19 and 20 19. "A wide area TCP/IP protocol network comprising: • <u>at least one ground station</u> ..., and at least <u>one ground station being coupled to a TCP/IP protocol network to exchange TCP/IP data packets with said network;</u>	Claims 19 and 20 19. "A wide area TCP/IP protocol network comprising: • <u>a plurality terrestrial nodes</u> ..., where at least <u>some of said terrestrial nodes are capable of repeating TCP/IP data packets destined for other terrestrial nodes;</u>

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	<p>The distinction would have been obvious to substitute "a plurality" for "at least one" and "terrestrial nodes" for "ground station" since both substitutions are replacing one term with another that is inherently synonymous.</p>
<ul style="list-style-type: none"> ... <u>non geo-synchronous earth-orbiting bodies</u> ... <u>earth-orbiting bodies</u> ... can communicate with said at least one <u>ground station</u> at any given point in time." 	<ul style="list-style-type: none"> ... <u>non-terrestrial nodes</u> ... <u>non-terrestrial nodes</u> ... can communicate with (<u>transmitting, originating and receiving</u>) at least one <u>non-terrestrial node</u>, and wherein said at least one non-terrestrial node includes

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	<p>The distinction would have been obvious to substitute the term “non-terrestrial nodes” for “non geo-synchronous earth-orbiting bodies”, because figures 33 and 34 show a communication link (handing off) involving at least one satellite, operating as part of a network.</p> <p>It would have been obvious to include “originating” to describe the communication link because figures 33 and 34 show a communication link (handing off, or a broadcast) involving at least one satellite operating as part of a network.</p>
<p>20. “A wide area TCP/IP protocol network as recited in claim 19 wherein:</p> <ul style="list-style-type: none">• ... <u>earth-orbiting bodies include a plurality of low-earth orbit satellites that communicate with TCP/IP compatible data packets,</u>	<p>20. “A wide area TCP/IP protocol network as recited in claim 19 wherein:</p> <ul style="list-style-type: none">• ... <u>non-terrestrial nodes include a plurality of earth-orbiting satellites that communicate with TCP/IP compatible data packets,</u>

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	<p>The distinction would have been obvious to substitute the term “non-terrestrial nodes” for “non geo-synchronous earth-orbiting bodies”, because figures 33 and 34 show a communication link (handing off) involving at least one satellite, operating as part of a network.</p>
<p>said satellites communicating both with <u>said ground station</u> and with at least one other satellite, said satellites handing off communication with said <u>ground station</u> to a satellite that is in a best position to communicate with said <u>ground station</u>.”</p>	<p>and wherein said <u>terrestrial nodes</u> repeat a received TCP/IP data packet if it is not timed out, if it has not previously received that data packet, and if that data packet was not destined for that <u>terrestrial node</u>.”</p>

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	<p>It would have been obvious to substitute the term "non-terrestrial nodes" for "earth-orbiting bodies", within the context of a communication system, including, satellite to ground (or terrestrial) station (or node) handshaking.</p> <p>It would have been obvious to include "originating" to describe the communication link because figures 33 and 34 show a communication link (handing off, or a broadcast) involving at least one satellite operating as part of a network.</p>
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Application No. 08/808,882 -- Statutory Double Patenting

11. Claims 1-14 and 16-18, are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-14 and 16-18, of copending Application No. 08/808,882. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

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Application No. 08/808,882 -- Obvious-Type Double Patenting

12. Claims 19-20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 19-20 of copending Application No. 08/808,882. Although the conflicting claims are not identical, they are not patentably distinct from each other because the differences are very marginal (see following comparison table).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The distinction between the present application and Application No. 08/808,882 are as follows:

Application No. 08/808,882	Application No. 08/810,679 (presently under examination)
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<p>Claims 19 and 20</p> <p>19. "A wide area TCP/IP protocol network comprising:</p> <ul style="list-style-type: none"> • <u>at least one ground station</u> ..., and at least <u>one ground station being coupled to a TCP/IP protocol network to exchange TCP/IP data packets with said network;</u> 	<p>Claims 19 and 20</p> <p>19. "A wide area TCP/IP protocol network comprising:</p> <ul style="list-style-type: none"> • <u>a plurality terrestrial nodes</u> ..., where at least <u>some of said terrestrial nodes are capable of repeating TCP/IP data packets destined for other terrestrial nodes;</u>
	<p>The distinction would have been obvious to substitute "a plurality" for "at least one" and "terrestrial nodes" for "ground station" since both substitutions are replacing one term with another that is inherently synonymous.</p>
<ul style="list-style-type: none"> • ... <u>non geo-synchronous earth-orbiting bodies</u> ... <u>earth-orbiting bodies</u> capable of <u>(transmitting, originating and receiving)</u> can communicate with said at least one <u>ground station</u> at any given point in time." 	<ul style="list-style-type: none"> • ... <u>non-terrestrial nodes</u> ... <u>non-terrestrial nodes</u> ... can communicate with at least one <u>non-terrestrial node</u>, and wherein said at least one non-terrestrial node includes

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	<p>The distinction would have been obvious to substitute the term “non-terrestrial nodes” for “non geo-synchronous earth-orbiting bodies”, because figures 33 and 34 show a communication link (handing off) involving at least one satellite, operating as part of a network.</p> <p>It would have been obvious to include “originating” to describe the communication link because figures 33 and 34 show a communication link (handing off, or a broadcast) involving at least one satellite operating as part of a network.</p>
<p>20. “A wide area TCP/IP protocol network as recited in claim 19 wherein:</p> <ul style="list-style-type: none">• ... <u>earth-orbiting bodies include a plurality of low-earth orbit satellites that communicate with TCP/IP compatible data packets,</u>	<p>20. “A wide area TCP/IP protocol network as recited in claim 19 wherein:</p> <ul style="list-style-type: none">• ... <u>non-terrestrial nodes include a plurality of earth-orbiting satellites that communicate with TCP/IP compatible data packets,</u>

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	<p>The distinction would have been obvious to substitute the term “non-terrestrial nodes” for “non geo-synchronous earth-orbiting bodies”, because figures 33 and 34 show a communication link (handing off) involving at least one satellite, operating as part of a network.</p>
<p>said satellites communicating both with <u>said ground station</u> and with at least one other satellite, said satellites handing off communication with said <u>ground station</u> to a satellite that is in a best position to communicate with said <u>ground station</u>.”</p>	<p>and wherein said <u>terrestrial nodes</u> repeat a received TCP/IP data packet if it is not timed out, if it has not previously received that data packet, and if that data packet was not destined for that <u>terrestrial node</u>.”</p>

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	<p>It would have been obvious to substitute the term "non-terrestrial nodes" for "earth-orbiting bodies", within the context of a communication system, including, satellite to ground (or terrestrial) station (or node) handshaking.</p> <p>It would have been obvious to include "originating" to describe the communication link because figures 33 and 34 show a communication link (handing off, or a broadcast) involving at least one satellite operating as part of a network.</p>
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Application No. 08/810,620 -- Statutory Double Patenting

13. Claims 1-14 and 16-18, are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-14 and 16-18, of copending Application No. 08/810,620. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

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Application No. 08/810,620 -- Obvious-Type Double Patenting

14. Claims 19-20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 19-20 of copending Application No. 08/810,620. Although the conflicting claims are not identical, they are not patentably distinct from each other because the differences are very marginal (see following comparison table).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The distinction between the present application and Application No. 08/810,620 are as follows:

Application No. 08/810,620	Application No. 08/810,679 (presently under examination)
Claims 19 and 20 19. "A wide area TCP/IP protocol network comprising: • <u>at least one ground station ...</u> , and at least <u>one ground station being coupled to a TCP/IP protocol network to exchange TCP/IP data packets with said network;</u>	Claims 19 and 20 19. "A wide area TCP/IP protocol network comprising: • <u>a plurality terrestrial nodes ...</u> , where at least <u>some of said terrestrial nodes are capable of repeating TCP/IP data packets destined for other terrestrial nodes;</u>

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	The distinction would have been obvious to substitute "a plurality" for "at least one" and "terrestrial nodes" for "ground station" since both substitutions are replacing one term with another that is inherently synonymous.
<ul style="list-style-type: none">• ... <u>non geo-synchronous earth-orbiting bodies</u> ... <u>earth-orbiting bodies</u> capable of (<u>transmitting, originating and receiving</u>) can communicate with said at least one <u>ground station</u> at any given point in time."	<ul style="list-style-type: none">• ... <u>non-terrestrial nodes</u> ... <u>non-terrestrial nodes</u> ... can communicate with at least one <u>non-terrestrial node</u>, and wherein said at least one non-terrestrial node includes

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	<p>The distinction would have been obvious to substitute the term “non-terrestrial nodes” for “non geo-synchronous earth-orbiting bodies”, because figures 33 and 34 show a communication link (handing off) involving at least one satellite, operating as part of a network.</p> <p>It would have been obvious to include “originating” to describe the communication link because figures 33 and 34 show a communication link (handing off, or a broadcast) involving at least one satellite operating as part of a network.</p>
<p>20. “A wide area TCP/IP protocol network as recited in claim 19 wherein:</p> <ul style="list-style-type: none"> • ... <u>earth-orbiting bodies include a plurality of low-earth orbit satellites that communicate with TCP/IP compatible data packets,</u> 	<p>20. “A wide area TCP/IP protocol network as recited in claim 19 wherein:</p> <ul style="list-style-type: none"> • ... <u>non-terrestrial nodes include a plurality of earth-orbiting satellites that communicate with TCP/IP compatible data packets,</u>

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	<p>The distinction would have been obvious to substitute the term “non-terrestrial nodes” for “non geo-synchronous earth-orbiting bodies”, because figures 33 and 34 show a communication link (handing off) involving at least one satellite, operating as part of a network.</p>
<p>said satellites communicating both with <u>said ground station</u> and with at least one other satellite, said satellites handing off communication with said <u>ground station</u> to a satellite that is in a best position to communicate with said <u>ground station</u>.”</p>	<p>and wherein said <u>terrestrial nodes</u> repeat a received TCP/IP data packet if it is not timed out, if it has not previously received that data packet, and if that data packet was not destined for that <u>terrestrial node</u>.”</p>

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	<p>It would have been obvious to substitute the term "non-terrestrial nodes" for "earth-orbiting bodies", within the context of a communication system, including, satellite to ground (or terrestrial) station (or node) handshaking.</p> <p>It would have been obvious to include "originating" to describe the communication link because figures 33 and 34 show a communication link (handing off, or a broadcast) involving at least one satellite operating as part of a network.</p>
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Claim Rejections - 35 USC § 102

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

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(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

16. Claims 1-5 and 7-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Templeton et al., U.S. Patent Number 5,692,126.

In regards to claim 1, Templeton et al. teaches a computer network system, substantially as claimed, comprising:

- a plurality of network accessible computers, each including a central processing unit and non-volatile memory, coupled to a network, implementing host computer programs which permit the network accessible computers to operate as host computers for client computers connected to said network, whereby input devices of said client computers can be used to generate inputs to host computers (see, FIG. 2, items 44, 46, 48, 50, and 66);
- such that image information generated by said hosts can be viewed by said client computers (see, col. 8, lines 52-55); and
- a cluster administration computer coupled to network accessible computers to monitor the operation of network accessible computers (see, col. 6, lines 4-28).

In regards to claims 2-5, 7-12, and 14-18, Templeton et al. teaches:

- a plurality of network accessible computers, each coupled to network by communications channels (see, FIG. 2, items 78, 82, and 88) satisfying claim 2;

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- each including volatile memory and data bus controllers (see, col. 5 and 6, lines 66-3) satisfying claim 3;
- a cluster computer system as recited in claim 1 wherein said network is a TCP/IP protocol network (see, col. 4, lines 27-28); and
- host computer means responsive to keyboards and pointing devices of clients as transmitted to hosts over said TCP/IP protocol network under the control of client programs running on said client computers, and host programs transmitting image information to client computers over said TCP/IP protocol network for display in browser windows of browser programs running on client computers (see, col. 8, lines 50-55) satisfying claim 4;
- client programs are transmitted to client computers over said TCP/IP protocol network (see, col. 4, lines 27-28) satisfying claim 5;
- cluster administration computer is operative to control at least one function of said network accessible computers (see, col. 6, lines 4-6) satisfying claim 7;
- cluster administration computer can reset a selected network accessible computer (see, col. 6, lines 4-6, and col. 8, lines 57-65) satisfying claims 8, 16 and 17;
- cluster administration computer is coupled to network to receive inputs from other computer systems coupled to network (see, FIG. 2, items 56 and 58) satisfying claim 9;
- cluster administrative computer servers coordinate the sharing of at least one local resource by network accessible computers (see, col. 8, line 61) satisfying claim 10;

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- one local resource is a data storage device (see, col. 6, lines 10-11) satisfying claim 11;
- cluster administrative computer is running a cluster administrative program which administers the connection of a client computer to a host computer (see, col 6., lines 8-9) satisfying claim 12;

As per claim 13, Templeton teaches a system substantially as claimed, as discussed above, and for providing access to host computers by client computers over a computer network comprising:

- receiving a request for a host computer coupled to a computer network from a client computer coupled to computer network from a client such that after said client computer becomes associated with a host, an input device can be used to generate inputs to host, such that image information generated by host can be viewed by client due to host program means; and
- determining a suitable host for client (see, col. 6, lines 11-24);
- determining a suitable host computer further including loading a personal state of a client, and comparing those requirements to characteristics of available hosts (see, col. 6, lines 11-24) satisfying claim 14;
- examining data packets on a first network to which a client computer is coupled and examining data packets on a second network to which a host is coupled, forwarding data for host from first network, forwarding data for client from second network, and

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processing data for at least one control purpose (see, col. 6, lines 7-11) satisfying claim 15; and

- informing client of network address of host whereby client can be associated with host discussed above in regards to claim 13 and (see, col. 6, lines 11-24) satisfying claim 18.

17. Claims 19 and 20 are rejected under 35 U.S.C. 102(e) as being unpatentable over Fielden et al., U.S. Patent Number 5,581,390.

As per claims 19 and 20, Fielden teaches apparatus and method for conveying frame timing, data timing, and data between remotely located positions, substantially as claimed, including:

- terrestrial nodes capable of transmitting and receiving TCP/IP compatible data packets, where at least one terrestrial nodes can repeat TCP/IP data packets destined for other terrestrial nodes (see, col. 3, lines 19-21 and 53-58); and
- terrestrial nodes include low earth-orbiting satellites that communicate with TCP/IP compatible data packets, and terrestrial nodes can repeat TCP/IP data packets if it is not timed out, if it has not previously received that data, and if that data was not destined for that terrestrial node (see, col. 3, lines 53-58).

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Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103 c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

19. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Templeton in view of van Hoff et al., (ISBN: 0-201-48837-X). Templeton discloses a system enabling high speed transmission of voice, image and data, as discussed above.

Although the system disclosed by Templeton shows substantial features of the claimed invention, as discussed above, it does not disclose the specific limitation of Java Applet client program adapters, as advanced in the claimed invention. Nevertheless, such limitations would have been an obvious modification to Templeton, as evidenced by van Hoff et al. Van Hoff, in a

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text book for an analogous art, discloses an Java Applet adapter. Van Hoff discloses that Java Applets became useful as the World Wide Web evolved from a text-based interface into an image-enriched interface including text and data (see, page 8, paragraph 2, line 2). Van Hoff further discusses Java's popularity and widespread use as a platform-neutral, programming language. Java programming language is used to create an adapter, i.e., a Java Applet, which will operate in a non-native environment, allowing an Internet user access to visual information and data resident on different operating systems. Therefore, the use of Java Applets to transmit data, would have been an obvious modification of the system disclosed by Templeton, motivated by the developers' desire to be compatible with as many operating systems as possible.

Response to Arguments

20. Applicant's arguments filed July 28, 1999 have been fully considered but they are not persuasive, and the original rejection stands. The invention is directed towards TCP/IP protocol data transfer in a computer network.

The Applicant argues that Templeton does not disclose client computer remote access and control of another (host) computer. Applicant admits that Templeton does, in fact, disclose host computers (FIG. 2, items 54 and 56) which do provide services to client computers (items 44, 46, 48 and 50) though asserts while called host computers "the Templeton computers do not act as host computers ... [since host computers] provide requested services to other computers, such as

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data storage, file transfer, and data processing" page 4, para. 3, line 1. Applicant has overlooked the basic network system of Templeton.

Templeton discloses both host and client computers, operating within a network with file servers and work stations specifically connected to the network, for service and control by the remote client and subscriber requests.

Applicant also argues that Fielden does not disclose or suggest a non-terrestrial node including a host computer. However, if host computers provide requested services to other computers, such as data storage, file transfer, and data processing, the data communication with satellites (12) and any number of subscriber units (26) demonstrates that Fielden in fact does disclose or suggest non-terrestrial node including a host computer.

Conclusion

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Kleinerman, et al. (USPN 5,228,137) teaches a method for controlling execution of host computer application programs through a second computer by establishing relevant parameters having variable time of occurrence and context.
- Barone, et al. (USPN 5,315,711) teaches a method and apparatus for remotely and centrally controlling a plurality of host processors.

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- Dillon, et al. (USPN 5,968,129) teaches a method and apparatus for selectively retrieving information from a source computer using a terrestrial or satellite interface.

22. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William Titcomb whose telephone number is (703) 305-0081.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess, can be reached on (703) 305-4792. The facsimile number for this Group is (703) 305-7201. Any inquiry of a general nature or relating to the status of this

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application or proceeding should be directed to the Group's Receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 308-9051, (for formal communications intended for entry)


or:

(703) 308-5357 (for informal or draft communications please label
"PROPOSED" or "DRAFT");

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington VA., Sixth Floor (Receptionist).

wdt

November 17, 1999


GLENTON B. BURGESS
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